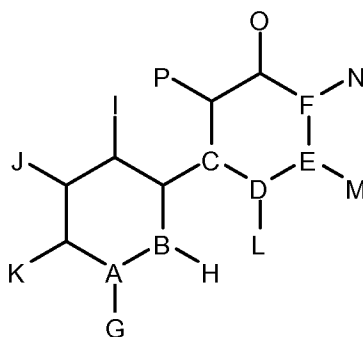


AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (CURRENTLY AMENDED) A compound ~~having~~ of Formula I:



(I)

or a pharmaceutically acceptable salt, ester, or amide thereof,

wherein ~~A, B, C, D, E and F~~ A and B constitute part of a pyridine ring and C, D, E and F constitute part of an imidazole ring ~~3-, 4-, 5- or 6-member ring system of unsaturated, partially unsaturated or saturated heterocyclic and carbocyclic rings~~, wherein the ~~A, B, C, D, E and F~~ A-B and C-F ring system is systems is each independently and optionally substituted with hydrido, acyl, halo, lower acyl, lower haloalkyl, oxo, cyano, nitro, carboxyl, amino, lower alkoxy, aminocarbonyl, lower alkoxy carbonyl, alkylamino, arylamino, lower carboxyalkyl, lower cyanoalkyl, lower hydroxyalkyl, alkylthio, alkylsulfinyl, aryl, lower aralkylthio, lower alkylsulfinyl, lower alkylsulfonyl, aminosulfonyl, lower N-arylamino sulfonyl, lower arylsulfonyl, and lower N-alkyl-N-arylamino sulfonyl; ~~wherein aryl of the A, B, C, D, E and F ring system is selected from phenyl, biphenyl, and naphthyl, 5-membered heteroaryl, and 6-membered heteroaryl, and is optionally substituted with one or two substituents selected from the group consisting of halo, hydroxyl, amino, nitro, cyano, carbamoyl, lower alkyl, lower alkenyloxy, lower alkoxy, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, lower alkylamino, lower dialkylamino, lower haloalkyl, lower alkoxy carbonyl, lower N-alkyl carbamoyl, lower N,N dialkyl carbamoyl, lower alkanoylamino, lower cyanoalkoxy, lower carbamoylalkoxy, and lower carbonylalkoxy; and wherein the acyl group is optionally substituted with a substituent selected from hydrido, alkyl, halo, and alkoxy;~~

wherein G, H, I, J, K, L M, N, O and P are independently selected from the group consisting of hydrogen, aminoalkyl, aralkyl, aryl, heteroaryl, heteroaralkyl, heteroaralkyloxy, aroyl, aroylalkyl, aryloxy, aryloxyalkyl, hydrido, alkyl, alkenyl, alkynyl, alkoxy, alkoxyalkyl, acyl, acylalkyl, acyloxy, acyloxyalkyl, halo, haloalkyl, cyano, cyanoalkyl, nitro, nitroalkyl, carboxyl, carboxylalkyl, amino, aminoalkyl, aminocarbonyl, aminocarbonylalkyl, carbamoylalkyl, carbamoylalkoxy, iminoalkyl, imidoalkyl, alkoxycarbonyl, alkoxycarbonylalkyl, alkylamino, alkylaminoalkyl, dialkylamino, dialkylaminoalkyl, arylamino, arylaminoalkyl, hydroxy, hydroxyalkyl, isocyano, isocyanoalkyl, isothiocyano, isothiocyanoalkyl, oximinoalkoxy, morpholino, morpholinoalkyl, azido, azidoalkyl, formyl, formylalkyl, alkylthio, alkylthioalkyl, alkylsulfinyl, alkylsulfinylalkyl, alkylsulfonyl, alkylsulfonylalkyl, aminosulfonyl, arylsulfonyl, N-alkyl-N-arylaminosulfonyl; wherein the aryl of G, H, I, J, K, L M, N, O and/or P is optionally substituted and is selected from the group consisting of phenyl, biphenyl, naphthyl, 5-membered heteroaryl, and 6-membered heteroaryl.

2. (CURRENTLY AMENDED & WITHDRAWN) The compound of claim 1, ~~wherein the heterocycles which make up the central ring systems of formula I comprising the A, B, C, D, E and F atoms are selected from the group consisting of pyrrolidine, piperidine, piperazine, heptamethyleneimine, hexamethyleneimine, homopiperazine, perhydroindole, azetidine, 4-piperidinopiperidine, 1-azacycloheptane, imidazolyl, perhydroisoquinoline, decahydroquinoline, 1-phenylpiperazine, 4-phenylpiperidine, 1-(fluorophenyl)piperazine, 1,3,5-hexa-hydrotriazine, morpholine, phenylmorpholine, thiomorpholine, tetrahydrothiophene, thiazolidine, ω -thiocaprolactam, 1,4-thioxane, 1,3-dithiane, 1,4,7-trithiacyclononane, 1,3,5-trithiane, tetrahydrofuran, tetramethyleneoxide, tetrahydropyran, 1,3,5-trioxane, and oxepane,~~

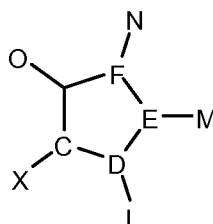
wherein the A-B and C-F heterocycles each independently and optionally have one or two ring hydrogens substituted with substituents selected from the group consisting of Cl, Br, I, -OR₄, -R₅, -OC(O)R₆, OC(O)NR₇R₈, -C(O)R₉, -CN, -NR₁₀R₁₁, -SR₁₂, -S(O)R₁₁, -S(O)₂R₁₄, -C(O)OR₁₅, -S(O)₂NR₁₆R₁₇; and -R₁₈NR₁₉R₂₀, wherein R₄, R₅, R₆, R₇, R₈, R₉, R₁₀, R₁₁, R₁₂, R₁₃, R₁₄, R₁₅, R₁₆, R₁₇, R₁₈, R₁₉, and R₂₀ are the same or different and are branched or unbranched alkyl groups from one to eight carbon atoms or hydrogen radicals.

3. CANCELLED

4. (CURRENTLY AMENDED & WITHDRAWN) The compound of claim 1, wherein two adjacent groups selected from G, H, I, J, K, L M, N, O and P are joined together to form a part of a fused carbocyclic ~~or heterocyclic~~ ring system.

5. (WITHDRAWN) The compound of claim 4, wherein L and M are part of a second ring that is fused to the C, D, E, F ring.

6. (CURRENTLY AMENDED) The compound of claim 1 having Formula II:



(II)

wherein ~~C, D, E and F constitute a 5-membered ring containing carbon, oxygen, sulfur, nitrogen, or phosphorus;~~

X is the ~~A, B~~ A-B ring system defined as in claim 1; ~~and~~

L, M, N, and O are defined as in claim 1; and

a) C and E are nitrogen and D and F are carbon, and the bond between C and D and the bond between F and the carbon connected to O are double bonds; or

b) C and E are nitrogen and D and F are carbon, and the bond between D and E and the bond between F and the carbon connected to O are double bonds; or

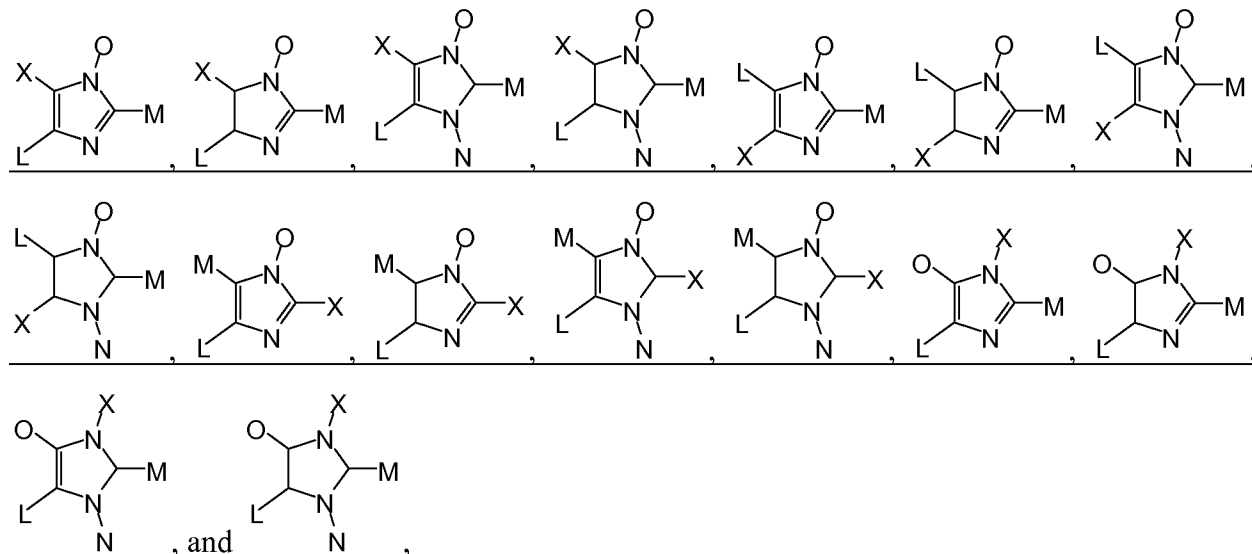
c) D and F are nitrogen and C and E are carbon, and the bond between E and F and the bond between C and the carbon connected to O are double bonds; or

d) D and F are nitrogen and C and E are carbon, and the bond between D and E and the bond between C and the carbon connected to O are double bonds.

7. (CURRENTLY AMENDED) The compound of claim ~~6~~ 1, wherein ~~C is a carbon; D is an oxygen, sulfur, or nitrogen; E is a carbon; and L, M, N, O and X are~~

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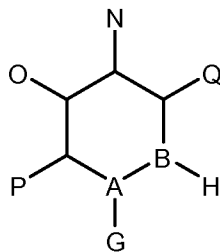
~~independently selected from aminoalkyl, alkylaminoalkyl, arylaminoalkyl, dialkylaminoalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, alkyl, haloalkyl, cyanoalkyl, iminoalkyl, imidoalkyl, isothiocyanoalkyl, morpholinoalkyl, azidoalkyl, and formylalkyl~~ the C-F ring is selected from the group consisting of



wherein X is the A-B ring system defined as in claim 1; and L, M, N, and O are defined as in claim 1.

8. CANCELLED

9. (CURRENTLY AMENDED) The compound of claim 1 having Formula III:



(III)

wherein A, B, G, H, N, O and P are defined as in claim 1 and wherein Q is the C-F ring system.

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10. (CURRENTLY AMENDED & WITHDRAWN) The compound of claim 9, wherein ~~A is a nitrogen, B is a carbon, and Q is a 5- or 6-member unsaturated, partially unsaturated or saturated heterocyclic and carbocyclic ring,~~

wherein the ring system of Formula III is optionally substituted with a group selected from the group consisting of hydrido, acyl, halo, lower acyl, lower haloalkyl, oxo, cyano, nitro, carboxyl, amino, lower alkoxy, aminocarbonyl, lower alkoxy carbonyl, alkylamino, arylamino, lower carboxyalkyl, lower cyanoalkyl, lower hydroxyalkyl, alkylthio, alkylsulfinyl, aryl, lower aralkylthio, lower alkylsulfinyl, lower alkylsulfonyl, aminosulfonyl, lower N-arylaminosulfonyl, lower arylsulfonyl, and lower N-alkyl-N-arylaminosulfonyl;

wherein the aryl is selected from the group consisting of phenyl, biphenyl, and naphthyl, ~~5-membered heteroaryl, and 6-membered heteroaryl,~~ and wherein the aryl is optionally substituted with one or two substituents selected from the group consisting of halo, hydroxyl, amino, nitro, cyano, carbamoyl, lower alkyl, lower alkenyloxy, lower alkoxy, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, lower alkylamino, lower dialkylamino, lower haloalkyl, lower alkoxy carbonyl, lower N-alkylcarbamoyl, lower N,N-dialkylcarbamoyl, lower alkanoylamino, lower cyanoalkoxy, lower carbamoylalkoxy, lower carbonylalkoxy; and

wherein the acyl group is optionally substituted with a substituent selected from the group consisting of hydrido, alkyl, halo, and alkoxy.

11. (CURRENTLY AMENDED) The compound of claim 9, wherein A is nitrogen and B is carbon; or wherein A is carbon and B is nitrogen ~~the Q ring is a substituted or unsubstituted radical selected from the group consisting of pyrrolyl, N-methylpyrrolyl, pyranlyl, furyl, tetrahydrofuryl, tetrahydrothienyl, thienyl, oxazolyl, pyrrolyl, thiazolyl, imidazolyl, isothiazolyl, isoxazolyl, pyrazolyl, cyclopropyl, cyclobutyl, cyclopentyl, phenyl, and pyridyl; and optionally has one or two ring hydrogens substituted with substituents selected from the group consisting of Cl, Br, I, OR₄, R₅, OC(O)R₆, OC(O)NR₇R₈, C(O)R₉, CN, NR₁₀R₁₁, SR₁₂, S(O)R₁₃, S(O)₂R₁₄, C(O)OR₁₅, S(O)₂NR₁₆R₁₇; and R₁₈NR₁₉R₂₀, wherein R₄, R₅, R₆, R₇, R₈, R₉, R₁₀, R₁₁, R₁₂, R₁₃, R₁₄, R₁₅, R₁₆, R₁₇, R₁₈, R₁₉, and R₂₀ are the same or different and are branched or unbranched alkyl groups from one to eight carbon atoms or hydrogen radicals.~~

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12. (ORIGINAL) The compound of claim 10 which is ~~3-(4-methyl-thiophen-3-yl)-pyridine, 3-(1H-imidazol-4-yl)-pyridine, 3-pyrazol-1-yl-pyridine, 3-thiophen-2-yl-pyridine, [3,3']bipyridinyl, or 3-thiazol-2-yl-pyridine.~~

13-40. CANCELLED

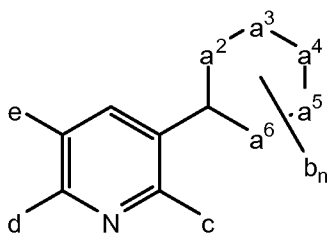
41. (ORIGINAL) A pharmaceutical composition comprising:

- (a) the compound of claim 1, or a pharmaceutically acceptable salt, ester, or amide thereof, and
- (b) a pharmaceutically acceptable carrier.

42-58. CANCELLED

59. (CURRENTLY AMENDED) A compound ~~selected from the group consisting of~~

(A) ~~a compound having of~~ Formula XI:



(XI)

or a pharmaceutically acceptable salt, ester, or amide thereof,

wherein the ring defined by a⁺, a², a³, a⁴, a⁵ and a⁶ is imidazole ~~are each independently selected from the group consisting of carbon, nitrogen, oxygen and sulfur, or is absent;~~

b_n is a substituent selected from the group consisting of hydrogen, methyl, lower alkyl, aminomethyl, N-methylaminomethyl, benzyl, oximino, amino, nitro, ethyl, formyl, bromomethyl, heteroarylaminomethyl, heteroaryl, 3-(3-methylthienyl)pyridyl, 2-(3-methyl)thienyl, 3-thienyl, CH₃O(C=O)-, N,N-dimethylaminomethyl, aminopropyl, hydroxymethyl, pyridyl and oxo; or alternatively, any two substituents adjacent to each other on

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the 5- or 6-membered ring may be taken together with the atoms to which they are attached to form a 5- or 6-membered aryl or heteroaryl ring system;

n is an integer from 0 to 10;

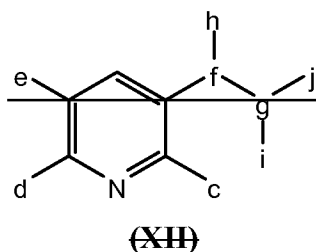
c is hydrogen or amino;

d is selected from the group consisting of hydrogen, fluoro, methoxy, amino and chloro;

and

e is a substituent selected from the group consisting of hydrogen, methyl, 2-(3-methyl)thienyl, $\text{CH}_3\text{O}(\text{C}=\text{O})$ -, bromo, ethynyl, 3-thienyl and hydroxymethyl; and

~~(B) a compound having Formula (XII):~~



~~wherein f and g are each carbon or nitrogen atom; and wherein f and g are connected to each other by a single, double or triple bond;~~

~~h and i are each independently hydrogen, lower alkyl group, or is absent; wherein h and i together with the atoms to which they attached may optionally be combined to form a 3- to 5-membered ring;~~

~~j is selected from the group consisting of aminomethyl, N-methylaminomethyl, amino, 2-(3-methyl)thienyl, 3-thienyl, N,N-dimethylaminomethyl, heteroaryl and 3-(3-methylthienyl)pyridyl;~~

~~e is hydrogen or amino;~~

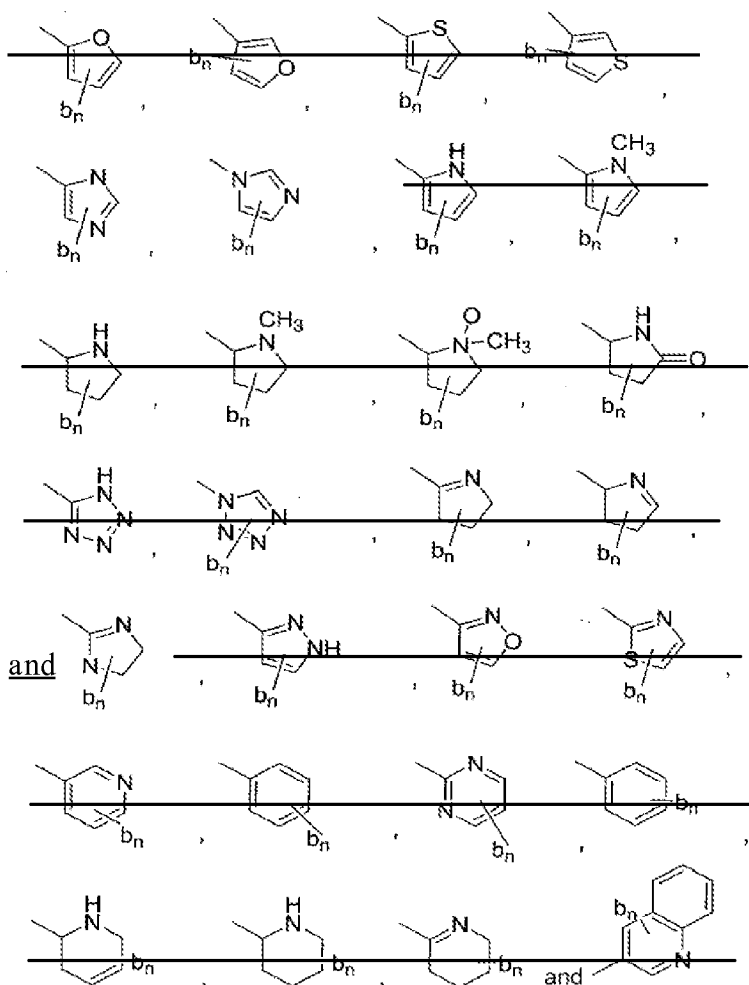
~~d is selected from the group consisting of hydrogen, fluoro, methoxy, amino and chloro;~~

~~and~~

~~e is a substituent selected from the group consisting of hydrogen, methyl, 2-(3-methylthienyl), $\text{CH}_3\text{O}(\text{C}=\text{O})$ -, bromo, ethynyl, 3-thienyl and hydroxymethyl.~~

60-61. CANCELLED

62. (CURRENTLY AMENDED) The compound of claim 59 wherein, the ring defined by a¹, a², a³, a⁴, a⁵ and a⁶ form a 5- or 6-member ring system is selected from the group consisting of

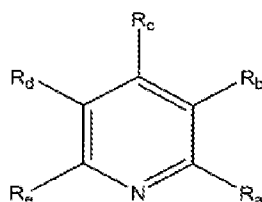


63-64. CANCELLED

65. (PREVIOUSLY PRESENTED) A pharmaceutical composition comprising:
 (a) the compound of claim 59, or a pharmaceutically acceptable salt, ester, or amide thereof, and
 (b) a pharmaceutically acceptable carrier.

66-71. CANCELLED

72. (CURRENTLY AMENDED) A compound ~~having~~ of Formula XIII:



(XIII)

or a pharmaceutically acceptable salt, ester, or amide thereof,

wherein R_a, R_c, and R_e are independently selected from the group consisting of hydrogen, (C1-C6)alkyl, (C1-C6)alkenyl, (C1-C6)alkynyl, heteroalkyl, halo, (C1-C6)alkoxy, amino, (C1-C6)alkylamino, hydroxy, cyano, and nitro;

R_b is imidazole, ~~a 5- or 6-member unsaturated, partially unsaturated or saturated heterocyclic and carbocyclic ring system; wherein the R_b ring system is optionally substituted with hydrido, acyl, halo, lower acyl, lower haloalkyl, oxo, cyano, nitro, carboxyl, amino, lower alkoxy, aminocarbonyl, lower alkoxy carbonyl, alkylamino, arylamino, lower carboxyalkyl, lower cyanoalkyl, lower hydroxyalkyl, alkylthio, alkyl sulfinyl and aryl, lower aralkylthio, lower alkylsulfinyl, lower alkylsulfonyl, aminosulfonyl, lower N-arylamino sulfonyl, lower arylsulfonyl, lower N-alkyl-N-arylamino sulfonyl; in which the above aryl member is selected from phenyl, biphenyl, or naphthyl, or 5- or 6-membered heteroaryl; wherein the above aryl member is optionally substituted with one, two, or three substituents selected from halo, hydroxyl, amino, nitro, cyano, carbamoyl, lower alkyl, lower alkenyloxy, lower alkoxy, lower alkylthio, lower alkylsulfinyl, lower alkylsulfonyl, lower alkylamino, lower dialkylamino, lower haloalkyl, lower alkoxy carbonyl, lower N-alkyl carbamoyl, lower N,N-dialkyl carbamoyl, lower alkanoylamino, lower cyanoalkoxy, lower carbamoylalkoxy, and lower carbonylalkoxy; and wherein the above acyl group is optionally substituted with a substituent selected from hydrido, alkyl, halo, and alkoxy; and~~

R_d is independently selected from a group as defined for R_a and R_b.

73. (WITHDRAWN) The compound of claim 72, wherein the R_b radical has one or two ring hydrogens substituted with substituents selected from Cl, Br, I, -OR₄, -R₅, -OC(O)R₆, OC(O)NR₇R₈, -C(O)R₉, -CN, -NR₁₀R₁₁, -SR₁₂, -S(O)R₁₁, -S(O)₂R₁₄, -C(O)OR₁₅, -S(O)₂NR₁₆R₁₇;

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and $-R_{18}NR_{19}R_{20}$, wherein $R_4, R_5, R_6, R_7, R_8, R_9, R_{10}, R_{11}, R_{12}, R_{13}, R_{14}, R_{15}, R_{16}, R_{17}, R_{18}, R_{19}$, and R_{20} are the same or different and are branched or unbranched alkyl groups from one to eight carbon atoms or hydrogen radicals.

74. (CURRENTLY AMENDED) A pharmaceutical composition comprising:
(a) the compound of claim ~~73~~ 72, or a pharmaceutically acceptable salt, ester, or amide thereof, and
(b) a pharmaceutically acceptable carrier.

75-88. CANCELLED

89. (NEW) A compound selected from the group consisting of:

